

What is claimed is:

CLAIMS

1. A digital television recording method comprising:
- broadcasting a television program associated with a broadcaster set of parameters enabling access to a first set of predetermined portions of the program;
 - operating an agent for determining whether to record the program and for associating with the program, upon recording of the program, an agent set of parameters enabling access to a second set of predetermined portions of the program;
 - storing the program together with the broadcaster set of parameters and the agent set of parameters to generate an addressable program;
 - retrieving at least a portion of the addressable program;
 - displaying said at least a portion of the addressable program to a user;
 - receiving from the user a user set of parameters enabling access to a third set of predetermined portions of the addressable program;
 - editing the addressable program to include said user set of parameters enabling access to the third set of predetermined portions of the addressable program thereby generating an edited addressable program; and
 - storing the edited addressable program.
2. A method according to claim 1 and wherein said agent set of parameters is operative to override at least a portion of the broadcaster set of parameters.
3. A method according to claim 1 or claim 2 and wherein said user set of parameters is operative to override at least one of the following: a portion of the broadcaster set of parameters; and a portion of the agent set of parameters.

4. A method according to any of claims 1 - 3 and wherein said broadcaster set of parameters comprises a subset of parameters which cannot be overridden by any of the following: the agent set of parameters; and the user set of parameters.

5. A method according to any of claims 1 - 4 and wherein at least one of said broadcaster set of parameters, said agent set of parameters, and said user set of parameters comprises a tag determining at least one of the following: a program retrieval parameter; and a content retrieval parameter.

6. A method according to any of claims 1 - 5 and wherein said agent set of parameters comprises a recording quality parameter determining a quality of recording of the program.

7. A method according to any of claims 1 - 5 and wherein said user set of parameters comprises a rating parameter determining a rating of the program as provided by the user.

8. A method according to any of claims 1 - 7 and wherein the television program comprises a commercial and the broadcaster set of parameters comprises a commercial set of parameters.

9. A method according to any of claims 1 - 8 and wherein the television program comprises a commercial and the broadcaster set of parameters comprises a parameter determining a request for additional information related to at least one of the following: the commercial; and the program.

10. A method according to any of claims 1 - 9 and wherein the television program comprises a commercial and the broadcaster set of parameters comprises a parameter determining expiration of the commercial after an event comprising at least one of the following: a predetermined number of people

having seen the commercial; and the user having seen the commercial a predetermined number of times.

11. A method according to any of claims 1 - 10 and wherein the broadcaster set of parameters comprises a parameter disabling fast-forward/fast backward browsing through the program .

12. A method according to any of claims 1 - 7 and wherein the television program comprises two separate television programs displayed simultaneously in a picture-in-picture (PIP) mode on a television screen, and the user set of parameters comprises a parameter determining a viewing selection for viewing only one of the two separate television programs on the full television screen.

13. A method according to any of claims 1 - 12 and wherein the broadcaster set of parameters comprises at least one parameter determining at least one of the following information fields: a type of the program; supplementary information accompanying the program; an associated audio channel in a language which differs from a language used in an original audio channel associated with the program; program delete enabled/disabled; parental control associated with at least a portion of the program which requires parental control; an expiration time of the program; picture-in-picture availability; a program title; a time when the program is broadcast; a length of the program; a determination whether the program is encrypted; a compression format of the program; characteristics of the program; cancellation of material already transmitted in the program; selective routing of part of the material to selected users; context specific tagging; and a media item.

14. A method according to any of claims 1 - 5 and 7 - 13 and wherein the agent set of parameters comprises at least one parameter determining at least one of the following information fields: a quality of recording of the program; a type of program whose recording is required; at least a title of a favorite program

whose recording is required; a time and a date when recording of the program is required; and existence of a review attached to the program; context specific tagging; a media item; and a category of the program.

15. A method according to any of claims 1 - 6 and 8 - 14 and wherein the user set of parameters comprises at least one parameter determining at least one of the following information fields: a program rating provided by the user; a review of the program; a request for additional information relating to the program; a format of the program after editing operations; at least one highlight in the program; compression preferences for compressing the program prior to storage; image manipulation; and video wallpaper selection.

16. A method according to any of claims 1 - 15 and wherein said first set of predetermined portions of the program, said second set of predetermined portions of the program, and said third set of predetermined portions of the addressable program include identical portions of the program.

17. A digital recording method comprising:
determining whether to record a program; and
recording the program in response to a recording determination at a recording quality determined by a recording quality parameter.

18. A digital recording method comprising:
determining whether to record a program;
storing the program in response to a recording determination; and
retrieving the program in accordance with a rating given to the program.

19. A digital recording method comprising:
determining whether to record a program;
storing the program in response to a recording determination; and
retrieving the program in accordance with a browsing hierarchy.

20. A digital recording method comprising:
determining whether to record a program;
recording the program in a circular buffer upon first activation of a freeze selector from a moment of the first activation of the freeze selector;
conditionally accessing the program recorded in the circular buffer for retrieval of the program from the circular buffer upon second activation of the freeze selector; and
playing the program retrieved from the circular buffer from the moment of the first activation of the freeze selector.

21. Apparatus for digital recording of a program comprising:
a receiver for receiving the program associated with a broadcaster set of parameters enabling access to a first set of predetermined portions of the program;

an agent module operatively associated with the receiver and operative to determine whether to record the program and to associate with the program, upon recording of the program, an agent set of parameters enabling access to a second set of predetermined portions of the program;

a memory operatively associated with the agent module and operative to store an addressable program, the addressable program including the program associated with the broadcaster set of parameters and the agent set of parameters;

a display operatively associated with the agent module, the receiver and the memory and operative to display at least a portion of the addressable program to a user;

an input/output (I/O) interface operatively associated with the agent module and operative to receive from the user a user set of parameters enabling access to a third set of predetermined portions of the addressable program; and

a user programming manager operatively associated with the memory, the I/O interface, the agent module, the receiver and the display and operative to generate an edited addressable program by editing the addressable

program to include the user set of parameters enabling access to the third set of predetermined portions of the program, and to store the edited addressable program in the memory.

22. Apparatus for digital recording of a television program comprising:
a processor for determining whether to record the television program;

a memory associated with the processor and operative to store the television program in response to a recording determination received from the processor; and

a recording quality selector associated with the processor and the memory and operative to select a recording quality parameter determining a quality of storage of the television program in the memory.

23. Apparatus according to claim 22 and also comprising a freeze selector operatively associated with the processor, wherein upon a first activation of the freeze selector, the processor is operative to record the program in the memory from a moment of first activation of the freeze selector, and upon a second activation of the freeze selector, the processor is operative to play the program recorded in the memory from the moment of first activation.

24. Apparatus according to claim 22 or claim 23 and also comprising:
a rating activator associated with the processor and the memory and operative to input information determining a rating given to the program.

25. Apparatus according to any of claims 22 - 24 and also comprising:
a NEXT key selector associated with the processor and the memory and operative to browse through television programs stored in the memory.

26. Apparatus according to claim 21 and wherein said NEXT selector is operative to browse through television programs stored in the memory in

accordance with an order determined by at least one of the following: the user; the agent; and the broadcaster.

27. Apparatus according to claim 25 and wherein said NEXT selector is operative to browse through television programs stored in the memory in accordance with a hierarchy.

28. Apparatus according to claim 27 and wherein said hierarchy is determined by at least one of the following: the user; the agent; and the broadcaster.

29. Apparatus for digital recording of a television program comprising:
a processor for determining whether to record the television program;

a memory associated with the processor and operative to store the television program in response to a recording determination received from the processor; and

a rating activator associated with the processor and the memory and operative to input information determining a rating given to the television program.

30. Apparatus according to claim 29 and also comprising a freeze selector operatively associated with the processor, wherein upon a first activation of the freeze selector, the processor is operative to record the program in a circular buffer from a moment of first activation of the freeze selector, and upon a second activation of the freeze selector, the processor is operative to play the program recorded in the circular buffer from the moment of first activation.

31. Apparatus according to claims 29 or 30 and also comprising:
a NEXT key selector associated with the processor and the memory and operative to browse through television programs stored in the memory.

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32. Apparatus for digital recording of a television program comprising:
a processor for determining whether to record the television program;

a memory associated with the processor and operative to store the television program in response to a recording determination received from the processor; and

a NEXT key selector associated with the processor and the memory and operative to browse through television programs stored in the memory.

33. Apparatus for digital recording of a program comprising:

a processor for determining whether to record the program;

a circular buffer associated with the processor and operative to store the program in response to a recording determination received from the processor;

a conditional access module for providing conditional access to the program stored in the circular buffer; and

a freeze selector operatively associated with the processor, wherein upon a first activation of the freeze selector, the processor is operative to record the program in the circular buffer from a moment of first activation of the freeze selector, and upon a second activation of the freeze selector, the processor is operative to play the program recorded in the circular buffer from the moment of first activation in accordance with conditions determined by the conditional access module.

34. Apparatus according to claim 33 and wherein said conditions determined by the conditional access module comprise disabling of fast-forward/fast-backward over selected portions of the program.

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